NEW ENGLAND FARMER.

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DISEASES OF CATTLE.

SELECTED AND COMPILED FROM THE BEST AUTHORS, BY THE EDITOR.

Inflammation of the Stomach.

"The complicated structure of this organ, in ruminating animals, renders it peculiarly liable to disease; inflammation, however, does not appear to occur frequently as a primary disorder, but is more commonly a consequence of some offensive matter lodged in one of the four stomachs, or from the animal's feeding so greedily, as to weaken the organ, and prevent it from performing its functions. In either of these cases, the principal object is to get rid of the offensive matter, by invigorating the weakened stomach, and enabling it to expel the matter, by which it is oppressed. Should inflammation attack the stomach, independently of this cause, that is without any hurtful matter having been swallowed, or any improper accumulation of food, the principal remedies would be plentiful bleeding and abstinence from food."—*White's Treatise on Veterinary Medicine.*

Dr. Peck says that the symptoms of this disorder are violent pain in the stomach; large blisters rise sometimes on the inside of the mouth; the animal is very restless, and appears to have the pain increased by every thing that is swallowed, which frequently brings a cough; the body feels clammy with sweat; difficulty of breathing. He attributes the cause to overloading the stomach; cold water; acid matter, or poisonous substances; not sufficient water in dry summers. The treatment recommended by this author is to bleed freely every day, if necessary; keep the body open with castor oil, &c. afterwards give febrifuges [such as glauber's salt, nitre, salt of tartar, spirit of nitrous ether] as in other cases of inflammation. When the animal is recovering, give it food sparingly, a little warm, such as scalded malt with warm water, &c.

Inflammation of the Bowels.

The principal symptom of this disease is a griping pain, which causes the animal to lie down frequently, and rise with difficulty. He frequently turns his head towards his belly, and endeavors to strike it with his hind foot; the body is full; the eyes dull; the pulse strong and quick. The quickness of the pulse forms a distinction between this complaint and the gripes, in which latter disorder, the pulse is sometimes hard, but seldom quickened. When the pain is violent, a copious perspiration takes place.—When proper remedies are not employed, the disease terminates in mortification and death. In the treatment of this complaint, the circumstances of the case must be carefully attended to. If the pulse is much quicker than natural, the under surface of the eye-lid unusually red, and the breathing disturbed, let a large quantity of blood immediately be taken away, even five or six quarts; and then, unless the bowels are unusually open, give the following drink:

Sulphate of magnesia [epsom salt,]	8 oz.
Castor oil,	1 pint.
Gruel,	1 pint.

Disolve the salts in the gruel, and add to them the oil, for one dose.

The operation of this drink should be assisted by clysters. When all the above symptoms, however, are not observable; if the under surface of the eye-lid is not redder than usual, or if it is rather pale; if the pulse is nearly in its natural state; and particularly if the animal is rather loose, or scours, the bleeding should be moderate; and if the animal be rather weak and in low condition, it had better be omitted. The following anodyne drink is to be given:

Tincture of opium,	½ oz.
Spirit of nitrous ether,	2 oz.
Water,	1 pt.

Mix for one dose.

When the animal has been kept sometime on dry food, and is apparently costive, relief can only be obtained by some laxative drink, like that first above mentioned, and clysters. Bleeding, however, must not be omitted, particularly if the pulse is quickened, the under surface of the eye-lid redder than natural, and the breathing disturbed. If the laxative prove ineffectual, in removing costiveness, it should be repeated.

Inflammation of the Liver.

"The structure of this organ in horned cattle and sheep, is different from that of the horse; the latter has no gall-bladder, but in the former, there is one of considerable size. It is on this account, perhaps, that cattle are more subject to diseases of the liver than the horse. I do not believe that inflammation of the liver often occurs in so acute a form, as to require bleeding largely; it is more commonly of a chronic or slow kind, causing a defective action in the organ, in consequence of which an unhealthy kind of bile is formed, which plugs up the ducts of the liver, and causes a derangement in the organs connected with it."—*White's Treatise.*

The symptoms of this disorder, according to Doct. Peck, are, difficult breathing; swelling about the short ribs; pulse hard, full and frequent; thirst; yellowness of the eyes; costiveness, &c. Fat beasts are most subject to this complaint in hot weather, by being over heated in driving, or running about the pasture; by being exposed to severe cold, when hot. The treatment recommended by Dr. Peck, is to bleed according to the symptoms; give cathartics, [purges,] clysters, febrifuges, &c.; Diet, mashes made of scalded bran and malt; blister the sides of the belly, and rowel underneath.

Inflammation of the Kidneys.

The following are the symptoms of this disorder:—quick pulse; loss of appetite; the animal is frequently endeavoring to stale, and voids only a small quantity with much difficulty and pain; pressure on the loins gives pain, and causes the animal to shrink or give way to it; there is generally, considerable stiffness in the hind parts, observable when the animal attempts to walk: the urine is commonly of a dark red color. This disease is, however, very different from that named red-water, [to be treated of hereafter] and unless properly treated at its commencement, often terminates fatally. Dr. Peck says, the symptoms that are of a favorable nature, are, urine high, or of a coffee color, discharged in large quantities; afterwards copious, thick, and mixed with mucus. The unfavorable are, sudden cessation of pain; urine dribbling away in small quantities, of a black and fetid color and smell. The disorder is caused by violent blows across the loins; small stones or gravel being lodged within the kidnies; violent motion or hard driving in hot and sultry weather.

Let the animal be bled freely and take a pint of castor oil. If the dung is at all hard, or deficient in quantity, let clysters or warm water, with a little sweet oil, be employed. The liniment or embrocation, directed for inflammation of the lungs [see page 177, 3d column] should be rubbed on the loins; after which, let them be well clothed, or covered with a fresh sheep or lamb's skin. When the pain and difficulty, or rather the almost constant straining to stale continues, after the castor oil has operated, and the bowels have been sufficiently opened, an anodyne clyster may be administered, consisting of about one ounce and an half of tincture of opium, in one quart of gruel; or, from one dram to two of crude opium, dissolved in warm water, and mixed with gruel.

If the animal is very thirsty, he should be restrained from drinking; and what he takes should be impregnated with some mucilaginous substance; an infusion of linseed, or decoction of marsh-mallows is very proper.

Inflammation of the Brain.

This disease is a kind of madness, attended with ravings and constant watchings; slow respiration; a strong pulsation in the temporal arteries, and sometimes irregular; running at the nose; the animal appears in a very fierce state, as if seized with a turbulent kind of madness; the eyes appear much inflamed and ready to start from their orbits; the beast falls down of a sudden, and rises again with the same volatility, until nature is quite exhausted; a constant trembling and starting of the tendons; a dry and harsh skin; a suppression of the urine; grinding of the teeth, and a total want of rest; these last are unfavorable symptoms.

The cause of this disorder is found in too great an efflux of blood pressing on the temporal arteries; from which an increased action takes place; wounds or contusions on the head; suppressions of the natural evacuations.

The cure should be sought by bleeding freely, according to the violence of the symptoms and the strength of the animal, in the jugular-vein; keep the bowels open with castor oil, and other purging medicines. Blister the side of the neck with flies and spirits of turpentine.

From what has been said of the treatment of diseases, caused by inflammation of the internal organs of the body, it will be seen that they are all of a dangerous nature, and require the earliest attention; that they are generally the consequence of improper management or neglect, and may, therefore, most commonly be prevented; and that the most essential remedy is *early* and copious bleeding, with laxative medicine.

(TO BE CONTINUED.)

INTERNAL IMPROVEMENT.

CANAL FROM WORCESTER TO PROVIDENCE.

We have been kindly presented with a pamphlet entitled "An account of the proposed Canal from Worcester to Providence; containing the Report of the Engineer; together with some Remarks upon Inland Navigation. Published by order of the Committee for the County of Worcester:" and shall take some note of its contents, confining ourselves, however, principally to the facts which it contains. The project of opening inland navigation from the waters of Narraganset Bay, in Rhode Island, to Worcester, in Massachusetts, thro' the valley or basin of Blackstone river, was first attempted about the year 1796, by the late John Brown, who, with the aid of an Engineer, surveyed the route, and found the plan not only practicable, but easy of execution. Many intelligent gentlemen were disposed to aid in the work, but to effect it, an act of incorporation from each of the States of Rhode Island and Massachusetts, was necessary. The Rhode Island legislature passed an act, which vested a company with powers and privileges to prosecute the design, but the legislature of Massachusetts withheld its assent to a corresponding Act of Incorporation.

This vote of the Massachusetts legislature prevented for a time any farther attempts to carry the project into execution. Committees, however, have been recently appointed to investigate the subject, who engaged Benjamin Wright, Esq. Chief Engineer upon the middle section of the great Erie Canal, to make a topographical survey of the route. Mr. Wright, with the aid of two assistant engineers, completed a survey in September last, and made a Report from whence the following facts are obtained.

The distance over the route for the proposed Canal is 45 miles as a canal would run; and the descent is 451 1-2 feet, from Thomas-street, in Worcester, to tide water at Providence. The ground is remarkably favorable. The soil generally easy to excavate—the embankments neither large nor extensive—very little solid rock to be removed—the aqueducts and culverts are not numerous or expensive. A canal 32 feet wide at top, 18 feet at bottom, and 3 1-2 feet depth of water would be the proper size to be formed. Locks of 70 feet between the gates, and 10 feet in width, would be sufficiently large for the trade intended—bearing in mind a proper economy in the use of water, and in the erection of the locks. North Pond, lying two miles Northerly from the Court-house in Worcester, and Dority Pond, in Millbury, are calculated to be sufficient to afford, by means of dams erected at their outlets, lockage water for 19,602 locks of 8 feet lift each. Long Pond, which falls into Blackstone River, covers at least 1,500 acres, and may be raised 6, 8, or 10 feet above its present level, with a small expense, and would, in the greatest drought, secure an abundant supply for the Canal without injuring, in the smallest degree, the important manufacturing interests along the Blackstone and its branches.

The whole expense, as reported by Mr. Wright, will amount to $323,319. In this estimate is included $15,395 for contingencies.

We shall conclude this notice by the following extracts, given verbatim from the pamphlet before us:

"The Report states that "the ground is *remarkably favorable*—the soil generally easy to excavate—the embankments neither large nor extensive—very little solid rock to be removed, and the Aqueducts and Culverts not numerous or expensive;" and it may be added that the route is remarkably direct. This fully accounts for the estimates of the Engineer, falling short of public expectation.

"The plan, then, is feasible, the supply of water abundant, and the expense much less than was contemplated; the only question, therefore, which remains to be settled is, whether it is *expedient?* On this point, those who have most carefully and deliberately examined the subject, would almost consider it heresy to doubt, so manifest are the advantages, and so obvious the importance to a large and fertile section of the country, whose prosperity probably experiences a severer check from the high charges for transportation on tonnage than from any other single cause. It is probable the question of expediency would not have slept, under the decision of the Legislature in 1796, until this time, without a renewed application for an Act of Incorporation, had there not been, during a large portion of that period, a peculiar concurrence of circumstances, which probably will not again recur."

"It is calculated that the expense of transporting on a Canal, exclusive of tolls, amounts to ONE CENT a ton, per mile, or *one dollar* a ton, for one hundred miles, while the usual cost of conveyance by land, is *one dollar and twenty five cents* per hundred weight, or *twenty-five dollars a ton*, for the same distance. "The celerity and certainty of this mode of transportation are evident. A loaded boat can be towed, by one or two horses, at the rate of twenty-five or thirty miles a day. Hence, the seller or buyer, can calculate, with sufficient precision, on his sale, or purchases—the period of their arrival—the amount of their avails, and the extent of their value. A vessel on a Canal is independent of winds, tides and currents, and is not exposed to the delays attending conveyances by land; and with regard to safety, there can be no competition. The injuries to which commodities are exposed, when transported by land, and the damages to which they are liable, when conveyed by natural waters, are rarely experienced on Canals. In the latter way, comparatively speaking, no waste is incurred, no risk is encountered and no insurance is required. Hence it follows, that Canals operate upon the general interests of society, in the same way that machines for saving labor do, in manufactures. They enable the Farmer, the Mechanic, and the Merchant, to convey their commodities to market, and to receive a return, at least *twenty-four* times cheaper, than by roads," [exclusive of tolls, which are usually very moderate.] "As to all the purposes of beneficial communication, they *diminish* the distance between places, and therefore encourage the cultivation of the most extensive and remote parts of the country. They create new sources of internal trade, and augment the old channel; for the more cheap the transportation, the more expanded will be its operation; and the greater the mass of the products of the country for sale, the greater will be the commercial exchange of returning merchandise, and the greater the encouragement to Manufacturers by the increased economy and comfort of living, together with the cheapness and abundance of provisions and raw materials. Consequently, Canals are advantageous to towns and villages, and to the whole country, by increasing population, augmenting individual and aggregate wealth, and extending foreign commerce."

Many who find the day too long, think life too short. But short as life is, some find it long enough to outlive their characters, their constitutions, and their estates.

AGRICULTURE.

From the Middlesex Gazette.

At a meeting of the Trustees of the Society of Middlesex Husbandmen and Manufacturers, holden at Concord, Jan. 1st, A. D. 1823, the following premiums were awarded:

To Col. Joseph Valentine, of Hopkinton, the sum of fifteen dollars, for the greatest quantity of Indian corn, raised on one acre of land, being 119 bushels, 3 pecks and 2 quarts. [For the soil and process of cultivation, see our last, page 178.]

To Ebenezer Little, of Shirley, the sum of ten dollars, for the next greatest quantity of Indian corn raised on one acre, being 66 bushels.

To James Kimball, of Littleton, the sum of seven dollars, for the greatest quantity of Barley raised on one acre of land, being 40 1-2 bushels of heavy two-rowed barley, weighing 50 lbs. the bushel.

Several other claims for premiums on Agricultural experiments were laid before the Trustees, and were deferred for further consideration, to the adjourned meeting of the Trustees, which will be holden at Darrah's Hotel, in Concord, on the 11th day of March next.

Agreeable to a vote of the Society in 1821, the Treasurer has distributed among some of the most intelligent and attentive farmers in the County, a quantity of Chili wheat and Riga flax-seed, for the purpose of having their value tested by various experiments. Seven of the persons, who received some of the wheat and flax-seed, have made reports to the Trustees, and although the experiments have been made in different parts of the county, and on a variety of soils, the result of each has been nearly the same. The wheat has in every instance failed. It grew with great luxuriance and apparent health and vigor, and seemed to promise an abundant product; but in each case there has been a general blast of the grain—no kernels have been produced which will equal either in size or fairness, those which were sown.

The success of the flax has been different. In every instance it has far surpassed any which has been ordinarily cultivated in this county. That which was sown on a rich soil grew to the height of six feet, and arrived at maturity in due season. No facts have yet been communicated from which the quality of the flax when fully prepared for the spindle, can be determined with certainty, but it is believed that it will be much superior to the flax usually raised in this vicinity.

By order of the Trustees,

N. BROOKS, *Rec. Sec.*

Description of a method of cultivating Peach Trees, with a view to prevent their premature decay; confirmed by the experience of forty-five years, in Delaware state, and the Western parts of Pennsylvania. By Thomas Coulter, Esq. of Bedford County, Pennsylvania.

From the Transactions of the American Philosophical Society.

The death of young peach trees is principally owing to planting, transplanting, and pruning *the same stock*, which occasions it to be open and tender, with a rough bark, in consequence of which insects lodge and breed in it, and birds search after them, whereby wounds are made, the gum exudes, and in a few years the tree is useless. To prevent this, transplant your trees

as young as possible, if in the kernel it will be best, as there will then be no check of growth. Plant them sixteen feet apart. Plow and harrow between them, for two years, without regard to wounding them, but avoid tearing them up by the roots. In the month of March or April, in the third year after transplanting, cut them all off by the ground, plow and harrow among them as before, but with great care, to avoid wounding or tearing them. Suffer all the sprouts or scions to grow, even if they should amount to half a dozen or more, they become bearing trees almost instantaneously, on account of the strength of the root. Allow no animals but hogs to enter your orchard, for fear of their wounding the shoots, as a substance drains away through the least wound, which is essential to the health of the tree, and the good quality of the fruit.

If the old stock is cut away the third year after transplanting, no more shoots will come to maturity than the old stump can support and nourish, the remainder will die before they bear fruit, and may be cut away, taking care not to wound any other stock. The sprouts when loaded with fruit will bend, and rest on the ground in every direction for many years, all of them being rooted as if they had been planted, their stocks remaining tough, and their bark smooth, for twenty years and upwards. If any of the sprouts from the old stump should happen to split off and die, cut them away, they will be supplied from the ground by others, so that you may have trees from the same for 100 years, as I believe. I have now trees from one to thirty six years old, all from the same stump. Young trees, formed in this manner, will bear fruit the second year; but this fruit will not ripen so early as the fruit on the older trees from the same stump. Three years after the trees are cut off, the shoots will be sufficiently large and bushy to shade the ground so as to prevent the growth of grass, that might injure the trees; therefore ploughing will be useless, and may be injurious by wounding them. It is also unnecessary to manure peach trees, as the fruit of manured trees is always smaller and inferior to that of trees which are not manured. By manuring you make the peach trees larger, and apparently more flourishing, but their fruit will be of a bad kind, looking as green as the leaves, even when ripe, and later than that of trees which have not been manured. Peach trees never require a rich soil: the poorer the soil the better the fruit: a middling soil produces the most bountiful crop. The highest ground is the best for peach trees, and the north side of hills the most desirable, as it retards vegetation, and prevents the destructive effects of late frosts, which occur in the month of April, in Pennsylvania. Convinced, by long experience, of the truth of these observations, the author wishes they may be published for public benefit, and has been informed, that Col. Luther Martin and another gentleman, in the lower part of Maryland, have adopted a similar plan with great advantage.

REMARK BY THE EDITOR.

☞ The method here described of managing peach trees will probably supply some useful hints for the culture of apple and other fruit trees. Old orchards might be renewed by cutting away in the proper season the old stocks, and leaving the most vigorous sprout to renew the stock, or making use of the stump to ingraft upon; if the fruit be not of the best quality.—New varieties of fruit, however, ought to be occasionally sought for from the seeds, as ingrafted fruits in process of time degenerate. A valuable paper on this latter subject may be found in the Transactions of the Society for the Encouragement of Arts, Manufactures and Commerce, written by Thomas Skyp Dyot Bucknall, Esquire, and republished in the Repertory of Arts, 2d Series, vol. 2. p. 361.

Account of a method of preventing the premature decay of Fruit Trees. By John Ellis, of New Jersey.

From the Transactions of the American Philosophical Society.

The decay of peach trees is owing to a worm, which originates from a large fly, that resembles the common wasp: this fly perforates the bark, and deposits an egg in the moist or sappy part of it. The most common place of perforation is at the surface of the earth, and, as soon as the worm is able to move, it descends into the earth, probably from an instinctive effort to avoid the winter's frost. This may be ascertained by observation, the track of the worm from the seat of the egg being visible at its beginning, and gradually increasing, in correspondence with the increasing size of the worm; its course is always downwards. The progress of the young worm is extremely slow; and if the egg is deposited at any considerable distance above the surface of the earth, it is long before the worm reaches the ground. The worms are unable to bear the cold of winter unless covered by the earth, and all that are above ground after frost are killed.

By this history of the origin, progress and nature of the insect, we can explain the effects of my method, which is as follows. In the spring, when the blossoms are out, clear away the dirt so as to expose the root of the tree, to the depth of three inches: surround the tree with straw, about three feet long, applied lengthwise, so that it may have a covering one inch thick, which extends to the bottom of the hole, the but-ends of the straw resting upon the ground at the bottom. Bind this straw round the tree with three bands, one near the top, one at the middle, and the third at the surface of the earth; then fill up the hole at the root with earth, and press it closely round the straw. When the white-frosts appear, the straw should be removed, and the tree should remain uncovered until the blossoms put out in the spring.

By this process the fly is prevented from depositing its egg within three feet of the root, and although it may place the egg above that distance, the worm travels so slow that it cannot reach the ground before frost, and therefore is killed before it is able to injure the tree.

The truth of the principle is proved by the following fact. I practised this method with a large number of peach trees, and they flourished remarkably, without any appearance of injury from the worm, for several years. I was then induced to discontinue the straw with about twenty of them. *All those which are without the straw have declined, while the others, which have had the straw, continue as vigorous as ever.*

FOR THE NEW ENGLAND FARMER.

It is not unfrequent to hear complaints of exorbitant taxation, and that the demands of pauperism form no inconsiderable item of the requisition, without the least advance to better the financial policy of towns in this particular. Many have been long accustomed to stipulate for the yearly maintainance of their paupers by auction, or other similar contract; a method, uniting great trouble with much expense. It is believed the adoption of other more judicious means would better subserve that beneficence embraced by the laws of humanity.

Therefore, to avail ourselves of the experience of past times, is a highly incumbent duty, so far as it will subserve the cause of humanity, and lighten the burthen of pauperism.

Should towns, having any considerable number of poor, provide lands proportioned to their wants and capacity, and place them under the superintendance of a practical farmer, aided by the united exertions of the most healthy of the paupers, it is believed that their labors, would in no small degree, contribute to the support of the whole.

The propriety of employing a practical farmer is self evident—for to the profession of agriculture, he unites economy and industry, the most important requisites in such an establishment—and is a judge of the kind and quality of the different soils that may fall to his care, and their adaptation to the several growths of profitable vegetables; also, his knowledge of the working part would enable him to make just exactions of others.

An attention to the breeding of swine, is an important acquisition, for while it regulates the pigery, it contributes largely to the accumulation of manure, without which, profitable returns cannot be expected from culture.

Manure being the mainspring in agriculture, an attention to it is of the highest importance, whether of inland location, or contiguous to the sea board—the latter, however, combines many advantages in that particular, not comprised in the former, as large collections might easily be made from sea and rock weed, dock mud, and many other floating substances possessing salt and other qualities important, whether for compost or other manure.

Establishments for the reception and maintainance of paupers on a somewhat similar plan, would no doubt greatly lighten taxation, and contribute to the comfort of the dependant, while under the guidance of sound policy, bottomed on benevolent principles, together with a well regulated police, essentially necessary to the health and comfort of old age, poverty and decrepitude would rarely be deprived of the necessaries and comforts of life, while the wants of the indigent would be provided for, at little or no expense to the community.

A MIDDLESEX HUSBANDMAN.

From the Columbian Star.

There is a practical infidelity abroad, which derides the idea of Divine Providence. Whatever calamity may happen, "forth steps the spruce philosopher," and descants learnedly on the causes which have produced it; and he is satisfied with the most absurd conclusions, if he can succeed in excluding the all-sustaining and controlling Sovereign of the Universe from any agency in the event.

FOR THE NEW ENGLAND FARMER.

ON THE PRESERVATION OF THE TEETH.

Keeping the teeth clean is indispensable to their preservation. By suffering the particles of food and other impurities which are constantly collecting about them to remain, is to favor the production and operation of those causes which effect their ruin.

Whatever then is best suited to keep them clean, without the power of injuring them, is also best calculated to prevent their discoloration and decay. The same causes which produce caries of the teeth, tend likewise to injure the gums and breath, rendering the latter offensive, the gums spongy, and detaching them from the teeth. Most of the imported tooth powders, and those whose composition is kept secret, possess some acid property, or grinding power, which hurts the teeth by corroding or abrading the enamel, or protecting surface of them, leaving the comparatively soft and bony part within, to turn black and perish, without the possibility of the tooth's being restored to a sound state. These dentifrices often give the teeth an unnatural whiteness and brilliancy, very pleasing at first, and for a time, before their real character and effects are suspected. All that any preparation of this kind was ever intended to accomplish, by any one excepting an impostor, is to keep the teeth clean, of a natural whiteness, the gums sound, and the breath sweet.

All these effects the following powder is well suited to produce, without its possessing any quality which can, in any length of time or freedom of use, occasion the smallest injury of any sort. From its well known property of sweetening putrid and offensive substances, *charcoal* has latterly been, by some, much commended, and by many used as a dentifrice. After some time however, its particles were found to possess a grinding power, from their hardness, which soon wore off the enamel.

Engravers avail themselves of this property of finely pulverized charcoal, to grind down and polish their plates.

THE TOOTH-POWDER.

Take of	Peruvian bark	2 parts.
	Armenian bole	4 "
	Prepared chalk	4 "
	Myrrh	2 "
	Loaf sugar	2 "
	Carbonate of soda	½ a part.
	Castile soap	2 parts.

These are to be pulverized, mixed, and passed through a sieve. Any apothecary can furnish this tooth-powder.

TOOTH BRUSHES.

The brush with which this powder is to be applied, should be sufficiently large and firm, and the hairs not too closely placed.

One reason for preferring hard brushes is, that they become softer by use, and another is that if not pretty stiff, they are not firm enough to clean the teeth thoroughly. They are never too hard unless they are so unyielding as to insinuate themselves between the teeth and gums, so as to separate them; this being guarded against, the firmer they are the better.

Having thus provided the powder and brush, the question is, how are they to be used?

The mouth should be rinsed with cold water, and the brush dipped into it before the powder is used. A quantity of the powder should then be taken up on the end of the brush, and applied to every part of each tooth, not only to the anterior surface of the fore teeth, but the brush covered with the dentifrice, should be successively applied to the inner, as well as the outer, surface of the upper and lower teeth, and also to their ends. The last motions of the brush should be carried from the gums to the ends of the teeth, in the direction of their length. This serves to elongate the gum and to spread its points more elegantly over the enamel. The best time for using the tooth powder is after breakfast, and this should be done every day. In addition to this, we should be careful to cleanse the mouth with water and the brush, after every meal; and this should be particularly attended to before going to rest, otherwise the foulness which is too often permitted to accumulate through the day, cannot fail to commit its ravages on the teeth, gums and breath thro' the night. Benserade, a Frenchman, said of a young lady, who had a very strong breath, whom he heard sing, " What a beautiful voice, and charming words, but the *air* is worth nothing." Mais l'air n'en vaut rien.

Brushing the teeth once a day, if faithfully done, is preferable to many hasty and imperfect attempts to clean them.

Merely to pass the brush a few times lightly and rapidly over the teeth, is of little service; four or five minutes should be diligently spent in performing this operation.

The idea that the enamel of the teeth can be injured by brushing, is as unfounded and absurd as it would be to suppose that the palms of the hands might be worn out by moderate labor.

The same grateful and refreshing sensations which result from bathing the surface of the body, arise also from a proper attention to the mouth. No one who neglects his mouth can be said to be personally neat; nor can any one who omits this necessary attention to himself, justly expect the *voluntary* attention of others.

FOR THE NEW ENGLAND FARMER.

MR. EDITOR,

I send you the following extract from a Memoir read before the Royal Academy of Sciences, as tending to show the great exertion, as well as the royal patronage, which is exercised in France, for the improvement of their manufactures. Though the success which attended this effort was not so complete as could have been wished, yet it appears to have settled a question as to which no satisfactory information could be before obtained. It had long been a question with the curious what animal produced the material of the Cashmere (or by some called Camel's hair) shawl, of which we see generally only those of the cheaper kind. The time taken as well as the intricacy of the manufacture giving to them a most prodigious value. It will be seen that the individuals in this expedition passed thro' Russia and Tartary. In Tartary was found the goat which produced this remarkable fleece, in the possession of some wandering tribes, who gave them the name of the Thibet goat. Thus the labor was prevented of passing to Thibet, Persia or Cashmere in India. It seems four hundred of these animals were brought to France, being only about one third of the number purchased. How far they may retain the fineness of their down in France, and what their utility in manufactures may be, time only can discover. It will be very long before the subject can be immediately important to us. But the knowledge cannot fail to be very interesting to such of your readers as have not seen this memoir. It goes to establish a fact as to which there was till of late great doubt, and is indeed an object of much curiosity and gratification. W.

Cashmere Goat, and its Importation into France.

The sight of these shawls, which are brought from Asia, and which spread all over Europe, make a part in the presents of the sovereigns of the east, and adorn the heads and waists of the rich inhabitants of those countries, gave rise to the question among the naturalists of Europe, what species of animal produced the material from which such precious stuffs were made.—Travellers gave no satisfactory information upon this subject. The general opinion was, that cashmeres were produced from a goat, but the particular species was not determined. The importation which has just been made clears up, in part, this difficulty, for these animals produce a down exactly like that of which the most rare shawls are made; I say in part, because it is not impossible that wool may be also employed for this purpoee, or that different kinds of the goat may unite to bring the manufacture to perfection. I shall describe particularly those which I have seen upon their arrival at two of our Mediterranean ports.

Their usual height is about 25 inches from the ground to the top of the back, and the length from the beginning of the tail to the head, three feet. Almost all have horns, which are straight, black, and for the most part round; those of some males, as well as females, are thick, furry, white in the majority of individuals, some brown or black, several spotted. They are formed of long hairs, which cover the legs, in part, and a very soft down. The latter is fine in proportion as the hair is long; the quality of one may be known from the other. This down grows near the skin, from which it separates and forms tufts, which can be drawn away by a comb or by the hand. Except in the case of an absolute prohibition, it appears as if our manufacturers could have no interest in importing these downy cashmere goats into France, for the material may be procured in the way of commerce: it would be sufficient for them to imitate the stuff which bears this name. M. Ternaux, so well known by his beautiful establishments, was not of this opinion. He had received, by the way of Russia, down enough to make some shawls; his success gave him the idea of procuring the animal on whose body nature had placed this down. The undertaking was not an easy one. He found in M. Jaubert, Master of Requests, and Professor of the Turkish language, a man of zeal and intelligence, who was not to be repulsed by obstacles, and who was much attached to this country. This gentleman had already travelled in the Levant, and could make himself understood among the different nations. He was willing to undertake the expedition.

In order to obtain the protection of Government, M. Ternaux presented him to the Duke of Richelieu, then Minister of Foreign Affairs. This Minister, who acknowledged the utility of the project, made a contract with Ternaux and Jaubert, in the name of the King, by which Ternaux was to receive a premium of encouragement if the expedition succeeded. The Government was to take a hundred goats at a

high price. In consequence of this, Jaubert left Paris in the month of April, 1818, recommended by the Duke of Richelieu to the notice of the Emperor of Russia. This Sovereign gave orders in his dominions that the French traveller should be furnished with all the facilities he needed. Jaubert went first to Odessa, Tangarock, and Astracan, to the camp of General Jermoloff, under the Caucasus, taking every where information from the Boukars respecting the Kirghiz and the Armenians, who frequent and inhabit the last of the cities. He was informed that there existed among the numerous hords of Kirghiz (a wandering people who came into Boukaria,) on the borders of Oueal, a species of goat which was almost always of a dazzling whiteness, and which bore every year, in the month of June, a remarkable fleece.—The samples shown him convinced him of the conformity of this down with that which came into France by the way of Russia.

The discovery was the more interesting to him, as it saved his time and a troublesome journey in crossing into Thibet, by Persia and Cashmere. He was not deceived, and in some hundred versts from the Wolga, in the middle of the Steppes, which separated Astracan from Oremburgo, he found thick down, which convinced him that he would not find it necessary to go much farther. He also remarked that they gave them the name of Thibet goats, in the language of the country, when they spoke of them. He then made his purchases, buying different lots among the Kirghiz of the horde called Cara Agedi (the black tree,) among the Kirghiz of the horde called Kaiskas, in all 1,229 beasts. He directed his troop towards Tzaritzin, where he passed the river Wolga. The season became severe, and the mortality among the goats was very great. He had formed a plan of embarking them at Tungarock, but the sea of Azoff was frozen. He was obliged to go along the coast with them to Theodosia or Cassa. He arrived there the 24th of December, after having lost 268 of his animals.—The 14th of February he sent, in a Russian vessel, the only one he could procure, 566, together with some Austrian sheep, under the care of a French supercargo. The vessel arrived at Marseilles towards the month of April: Jaubert had preferred not to come until he could bring the second troop, which he did not choose to leave behind.

It results from the experiment of Jaubert and Ternaux, that from 1,229 goats bought among Kirghiz, deducting all the losses which have taken place, there are at present in France 400 downy goats of Cashmere.

From the Hallowell Advocate, Jan. 4.

In the Advocate of last week I observed a communication from Samuel Preston, of Pennsylvania, to the publisher of the New England Farmer, wherein allusion is made to a *demonstration* of *friend* Preston's rules for gauging published in the Advocate of 8th Nov. last. The author of that demonstration is pleased to see the reasons for the rule given in that communication by the person who invented or discovered it. The *Rationale* of the rule are satisfactory except that it is not perceived *how* the reasons for performing *division* by *multiplication* depend on the *neutral properties* of *an unit*. The principle as laid down by friend Preston, of performing division by using a fraction, either common or decimal, as a multiplier, is familiar; but how this depends on the neutral properties of the unit is not readily comprehended. As Mr. Preston, from the tenor of his communications, seems to be a man of some science and ingenuity, and no doubt can fully explain his meaning, it is hoped he will make a more full and minute explanation of his ideas upon the neutral properties of the unit. The relations and properties of numbers are of that abstract nature, that more minute explanation is frequently required to convey ideas to others, than the person in full possession of them deems necessary. But as Mr. Preston has pledged himself to "explain and render" his rule (and of course all his reasons for it) "intelligible to any person master of the common rules of arithmetic," we have no doubt but his ideas upon the *neutral propertics* of the unit, will be made public.

The writer of this would have no objection to a correspondence with any gentleman of intelligence upon a *favorite science*. Should Mr. P. mean to allude to any other than a public correspondence, and such a wish should be hereafter expressed, the name and residence of the writer of this, can be given him, through a *channel* of the writer's own choice. C.

On the danger of using vessels of Lead, Copper, or Brass, in Dairies. By Mr. Thomas Hayes, Surgeon, of Hampstead.

From the Letters and Papers of the Bath and West of England Society for the Encouragement of Agriculture, &c.

Many eminent physicians have asserted, that butter is very unwholesome; while others, equally eminent, have considered it not only innocent, but as a good assistant to digestion; and each have been said to ground their opinions upon experience. Perhaps both may be right; and butter may be innocent or mischievous, according as it contains many or few adventitious materials, collected from vessels, &c. used in the process of making it.

I am led to these conjectures by observing, that in almost all the great dairies, the milk is suffered to stand in lead, brass or copper vessels, to throw up the cream. The closeness of the texture of these metals, and their coldness and solidity, contribute to separate a greater quantity of cream from the milk than would be done by wooden trundles, or earthen pans, both of which are also sometimes made use of.

As I wish to establish the possibility of the fact, that milk may corrode or dissolve particles of the vessels above mentioned, and thereupon be liable to communicate pernicious qualities to the butter, I beg leave to submit the reasons from which I draw this conclusion.

Whoever has been much in great dairies must have observed a peculiarly sour, frowsy smell in them, although they have been ever so well attended to in point of cleanliness, &c. In some, where the managers are not very cleanly, this smell is extremely disagreeable, owing mostly to the corrupted milk. In some it arises from the utensils being scalded in the dairy, and in others from a bad construction of the building itself, the want of a sufficient circulation of air, water, &c. but in all, a great deal of the lighter and more volatile parts of the milk fly off from the surface of the pans, and furnish a great quantity of acid effluvia to the surrounding air and ceiling; which is again deposited on every thing beneath it, and of course often on the vessels, after they have been put by clean, at the times of their being out of use. This may be observed to give a dull sort of an appearance to brass and copper, as if you had breathed upon them; for if you rub your fingers lightly over the vessels, you will have both the taste and smell of the metal.

It also happens sometimes, that after the vessels were washed, they are not carefully rinsed, nor perfectly dried by the fire; so that some of the milk, &c. is left on their surface, which dissolves the metals, either by its animal, oily, or acescent qualities.

This is not the only way, nor the worst, by which the butter may become impregnated with mischief. The greater the quantity of cream thrown up from the milk, the larger the profits accruing to the dairy-man; therefore he keeps it as long as he can, and it is frequently kept till it is very sour, and capable of acting upon them; if they are of lead, a calx or sugar of lead is produced; if brass or copper, verdigris.

It is true that the quantity cannot be very great; this, however, will depend upon the degree of sourness, and length of time which the milk stands; but, independent of the acid, the animal oil in the cream will dissolve brass and copper.

That an acid floats in the atmosphere of a dairy, may be proved, by placing therein a bason of syrup of violets, for a little time, which will be found to turn red.

If then I am right in my conjectures, as I think I am, from the innumerable experiments and observations which I have made to satisfy myself of the fact, and which it would be trifling to relate here, may not the reputation of wholesomeness, or unwholesomeness of butter depend upon, or be owing to some of the above causes? And may not many a casual, nay, obstinate complaint, which physicians have labored in vain to account for, have originated from this source? Butter is found, very frequently, to occasion much disorder to very weakly, delicate and irritable stomachs, yet these stomachs will bear olive-oil: this cannot easily be accounted for, but from metalic impregnation.

I will not contend, that all the ill effects attributed to butter are caused by the mineral particles, which it gains by the means above stated. I only insist that it is possible, and indeed very probable; and that, when butter is free from these particles, it is not so unwholesome as asserted; though, when it does not contain them, it is found to disorder very tender persons.

To enlarge upon the subject, or attempt to explain the many ways by which a very small quantity of the above metals may prove injurious to the human frame, in some particular constitutions, would be only to repeat what has already been said by older writers.* Some will perhaps say that my ideas are very far fetched, and others that my opinions are ill-founded; but I trust, whoever has read the illustrious researches of Sir George Baker, on the effects of lead, and the melancholy case of a young lady, who died from eating pickled samphire, very slightly impregnated with copper, and which others ate without being diseased, as related by Dr.

*See Sir George Baker's papers on the effects of lead, in the Medical transactions; Dr. Percival's paper on the same; and Dr. Falconer on copper vessels.

Percival, will receive my opinions with less objection. If I have erred, I have done it in honorable company.

I shall be very glad if the foregoing observations have sufficient influence on the dairy-men, to induce them to change their utensils. Very commodious vessels may be made of cast iron, equally well fitted for the purposes of the dairy, which will not be expensive, and will be more innocent and cleanly.

From the Connecticut Courant.

Useful but disagreeable hints on the approach of a New Year.

There is much good sense in the adage "frequent reckoning makes good neighbors." Settlements, however, are often postponed, because there is some trifling disagreement between the parties; and to look over old accounts is a dry undertaking. Add to this our propensity to put off 'till to-morrow, and the too prevalent grossness of feelings regarding the high obligations of justice, and we find the root, from whence spring many bitter quarrels and lawsuits. Wherefore, gentle reader, hear the voice of experience.

Fix on the *first day of January, every year*, as a date, beyond which no controversy of yours shall remain unsettled "so far as in you lies."

If your books are back, take care to have them "posted up" by that day.

If you find any person's account open, which has been paid, *balance it.*

Where the balance is against you, saddle your horse and go directly off and *pay it*—in money if you have it—if not, give your note.

Take especial care when your good easy neighbor, confiding in your honesty, has let his claim lie more than six years, not to permit that plea of rascals, "outlawed," to reduce you first to doubt whether it is due, and finally to offer to settle it, "if he will throw in a trifle." Pray, why did you not pay him before, when his witnesses were living, and the facts fresh? Such claims ought to be paid with interest, and that without delay, lest you die and the executor refuse to pay.

Where the balance is in your favor, do not, by any means neglect such a claim. 'Tis true, your neighbor may have said "he would take no advantage:" but he may die, or forget, or find on seeing your bill that "it is larger than you expected," and he may think you have omitted some credit. You do not meet on even ground.

Is there any matter that lies between you and any one of *doubtful honesty?* I beg of you to see well to that. Such a man, especially if poor, will have a heavy claim *against your estate*, in the event of your decease. Get a discharge from him, and call it even, though he may owe you a trifle. A release from such persons is as good as bank stock.

Finally, let not the light of another new year's morning rise upon you, until you shall have remitted "post paid" all you owe to *proprietors of newspapers.* Those are honorary claims, especially if due out of the state. Should the press stop for want of funds, the land will soon grow dark. You expect a pleasant song from them on that morning—but how can they sing if depressed with debt? They must "hang their harps on the willows," unless "cheered by your *corn* and your oil." ARISTIDES.

THE FARMER.

BOSTON:—SATURDAY, JAN. 11, 1823.

ON SAVING AND MAKING THE MOST OF MANURE.

(*Continued from page* 175.)

In our last number on this subject we adverted to WATER and EARTH, as the principal *absorbents* or treasurers of those particles or atoms, which constitute *manure*, or what is the same thing, the *food of plants.* We shall now proceed to further observations on those substances, considered as absorbents, treasurers, or receptacles of manure.

Water in its purest state, when it has been distilled, or filtrated through sand, still retains somewhat of the food of plants. Its component particles, oxygen and hydrogen, under certain circumstances, are seized by vegetables while in their growing state, and converted into the products which form the chemical constituents of all vegetables.* But pure water forms a meagre diet for plants. It may support life in vegetables, and some plants will maintain a feeble growth with very little nourishment excepting what is afforded to them by pure water and air. But when water is impregnated with certain salts and gasses, particularly such as are evolved during the fermentation and decomposition of vegetable and animal substances, it becomes what is called LIQUID MANURE. Urine, or the stale of all animals is water holding in solution certain salts and other substances, which are the *essence of manure*, or the food of plants, in a concentrated state. Fresh urine is a very powerful and efficacious manure, when properly applied, but if not mixed with solid matter it should be diluted with water, as when pure it contains too large a quantity of animal matter to form a proper fluid nourishment for absorption by the roots of plants.—Urine is lessened in value, but its useful qualities are not entirely lost, by putrescence. During putrefaction the greatest part of the soluble animal matter that urine contains is destroyed, it should therefore be used as fresh as possible, with the precaution of diluting it with water, or mixing it with earth. Putrid urine, however, is a valuable manure. It abounds in ammoniacal salts; and though less active than fresh urine is still very efficacious.†

According to some writers, and practical farmers, the value of the urine of cattle, if properly preserved and applied to the purposes of vegetation, is greater than that of all the dung which the same animals would yield! A letter from Charles Alexander, near Peebles, in Scotland, addressed to Sir John Sinclair, in 1812, for publication, contains much valuable information on this subject. "This intelligent farmer had long been impressed with the great importance of the urine of cattle as a manure, and he set about to discover by a long and well conducted series of experiments, the best method of collecting and applying it. He began by digging a pit contiguous to the feeding stall, but distinct altogether from that which was appropriated for the reception of the dung. The dimensions of this pit, according to his own account, were 36 feet square, and four feet deep, surrounded on all sides by a wall; and the solid contents were 192 yards. Having selected the nearest spot where he could find loamy earth, and this he always took from the surface of some field under cultivation, he proceeded to fill it; and found that with three men and two horses, he could easily accomplish 28 cubic yards per day; and the whole expense of transporting the earth did not exceed 4*l.* 16*s.* sterling, [about 22 dollars.] When the work was complete he levelled the surface of the heap in a line with the sewer, which conducted the urine from the interior of the building, on purpose that it might be distributed with regularity, and might saturate the whole from top to bottom. The quantity conveyed to it he estimates at about 800 gallons; but as this calculation was founded partly on conjecture, for he measured not the liquor, it will be better and more instructive to furnish and proceed on DATA that are certain and incontrovertible. The urine was supplied by fourteen cattle, weighing about 34 stone [476 lbs.] each, and kept there for five months on fodder and turnips. The contents of the pit produced 288 loads, allowing two cubic yards to be taken out in three carts; and he spread 40 of these on each acre, so that this urine in five months, and from fourteen cattle, produced a compost sufficient for the fertilization of seven acres of land. He states further, that he had tried this experiment for ten years, and had indiscriminately used in the same field either the rotted cow dung or the saturated earth; and in all stages of the crop he had never been able to find any perceptible difference. But what is still more wonderful, he found his compost lasted in its effects as many years as his best putrescent manure; and he therefore boldly avers that a load of each is of equivalent value.

"It appears, then, that in five months each cow discharges urine, which, when absorbed by loam, furnishes manure of the richest quality and most durable effects for half an acre of ground. The dung pit, which contained all the excrementitious matter of the fourteen cattle, as well as the litter employed in bedding them, and which was kept separate for the purpose of the experiment, only furnished, during the same period, 240, and these, at the same rate, could only manure six acres. The aggregate value of the urine, therefore, when compared with that of the dung, was in the ratio of 7 to 6; so that we are borne out by these premises in this extraordinary inference, that the putrescible liquor, which in this province [Nova Scotia] and under the management of our farmers, is wasted and annihilated as far as regards any useful purposes, is intrinsically worth more than the dung, as an efficacious and permanent dressing; and if we take into consideration that this latter manure is not treated with any skill and judgment, it will not seem surprising, that the culture of white crops has never been carried here to any extent, since we have despised and neglected the only means of creating them."*

We apprehend that the farmers of the United States are not, generally speaking, any more solicitous to turn the urine of their cattle to account for manure, than those of Nova Scotia. There are some cultivators, however, who have taken measures to secure this substance, and to apply it to useful purposes. Mr. Robert Smith, of Baltimore, has his stables constructed in such a manner that all the liquid discharges of his cattle are conducted, together with the wash of the barn-yard, into a cistern, pumped into a hogshead and applied in a liquid state to the soil which it is wished to manure.† This mode of making use of this substance is likewise recommended in the *Code of Agriculture* as follows:—"The advantages of irrigating grass lands with cow urine almost exceed belief. Mr. Harley, of Glasgow, (who keeps a large dairy in that town,) by using cow urine, cuts some small fields of grass six times, and the average of each cutting is fifteen inches in length. There are disadvantages, however, attending this mode of applying this powerful manure. It must be applied soon after it is formed, or oftentimes the putrefactive process will commence, and deprive it of a part of its efficacy. And as urine is of a scorching quality, it is

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* *See an account of M. Braconnel's experiments*, p. 134.

† *See Dary's Agricultural Chemistry.*

* *Letters of Agricola.*

† *See N. E. Farmer, No.* 6, *p.* 44.

unsafe to apply it to growing crops in great heat or drought. Hence it is unadvisable to use it, except for grass, after the month of April or May, unless diluted. It is particularly useful in the spring, when the application of liquid manure gives a new impetus to the plant and makes its growth more vigorous. This manure forces newly planted cabbages in a most remarkable manner."

If it be true that more manure can be obtained from the stale of cattle than from their dung and litter, in the proportion of 7 to 6 (as would seem by Mr. Alexander's experiments as above detailed) and that by our common modes of husbandry this stale is nearly or quite squandered away, the discovery is of very great importance indeed to agriculture. It is nothing less than a method by which farmers may, with a small expense, somewhat more than double their usual quantity of stable manure. And if farmers should "value manure as a miser does his strong box—should grasp after and hoard it as eagerly and anxiously as a covetous man accumulates treasure,"* surely the wise cultivator will not grudge some labor and expense to acquire more than double the usual quantity of so valuable an article. It is very true there are many things to be taken into consideration in all these economical processes. A principal inquiry should ever be whether the saving will cost more than the benefit arising from it will be worth. Many improvements, which are highly valuable in old and populous countries, where labor is cheap and land dear, cannot be advantageously adopted in this country, where the object, in general, is rather to make the most of our labor than of our land. It is to be recollected, likewise, that in New England, during a considerable part of the time in which cattle are usually housed, the liquid manure is soon converted into ice, and, in that state, must be transferred to the dung-heap, or inconvenient accumulations will take place before a thaw would render it practicable to separate the liquid from the solid parts of the manure. Still, with all these disadvantages, we believe, in most cases, it is highly advisable to preserve the liquid portion of stable manure separate from the solid part; especially where cattle are soiled, or horses stabled during all or the greater part of the year. In our next number, on the subject of these essays, we propose to state some means by which such separation and preservation may be conveniently and economically effected.

* *These expressions, we believe, belong to the Hon. Mr. Peters, of Pennsylvania, but we do not recollect where we found them.*

(TO BE CONTINUED.)

Mistake Corrected.—In our paper of Dec. 28, p. 174, is an article headed "*Satellites of Venus*," which is attributed to the Buffalo Patriot of 26th Nov. This we are credibly informed made its first appearance in some British newspaper above a year ago. We are moreover told that the magnifying power, which that article states as the property of the common mirror, does not exist, but that a mirror will sometimes *reflect* double or triple images of objects. This circumstance led the Calcutta gentleman to suppose that the planet Venus was accompanied with satellites, when for any thing we know to the contrary, her ladyship is as destitute of attendants as a belle of the last century, whose charms have long since faded into non-entity.

FARMER SUMMARY OF NEWS.

CONGRESS exhibits appearances of industry, and there is every indication of the session's being less wordy, not so windy, and more efficient than some preceding ones. Mr. *Cannon* has shewn himself to be a good piece of *ordnance* by sundry *reports*, which we have not *calibre* sufficient to repeat. They relate, however, to improving the Militia of the U. States—Of inquiring into the expediency of continuing the preference given to West Point Cadets in entering the public service over those of Patridge's Academy and others—Of employing the regular army in building fortifications—A statement of the duties performed by navy officers, &c. A bill has been reported for allowing the mother and sister of the late Wm. H. Allen, $150 per annum each, for five years.——Resolutions have passed both Houses for inquiring into the present state of the trade and intercourse between the U. States and the Island of Hayti, and report what measures would be necessary to improve the commerce of both countries.——Mr. Taylor, of N. York, has moved a resolution, That the Committee on the Judiciary be instructed to inquire into the expediency of allowing costs in all cases where damages may be recovered for the violation of the rights of patentees, under the several acts concerning the issuing of patents for useful discoveries and inventions.

FOREIGN.—An arrival at New York from Havre, brought Paris papers to the 19th November, containing the latest advices from Europe. By them we learn that the Congress at Verona held their first business session on the last day of October. The assembly deliberates with closed doors, and of course, nothing to be depended upon, can be gathered respecting their proceedings. With regard to Greece, the accounts look encouraging. Letters from Trieste, [no date given] inform that a large body of Greek troops had penetrated from Livadia to the southern part of Thessaly, where they attacked and entirely defeated the forces of Chourschid Pacha, collected there—details not received. The Turkish fleet which suffered so severely in the Morea, had finally arrived in the Dardanelles, and its distressed condition had spread dismay throughout the whole city. It is said, likewise, that the Greeks had gained great advantages over the Turks in Candia.

A firman has been issued by the Turkish government, prohibiting the use of furs, gold lace, cashmere shawls, &c. which has excited much agitation in Constantinople; and the English merchants there, were seriously affected by its operation.

A Vienna article, dated Nov. 2, states, on the authority of letters from Verona, that the Ministers of the five powers there, have unanimously voted to disapprove of the progress of events in Spain, and that the interests of Europe will not allow them to remain as they are. This is to be formally and officially notified to the Cortes by a manifesto. Should they refuse to listen to this memorial, the ulterior measures of the Cortes will be looked for with anxiety. And it is said that the only answer which the Cortes will give to any Manifesto from the Congress at Verona, will be a decree to raise an additional army of 100,000.

A Paris paper says "it is believed that Russia, Austria and Prussia are determined to extinguish every spark of revolution." The French government, however, says a London paper, are determined to abide by the decision of England, in regard to Spain.

The Caledonian Canal, in Scotland, which opens a communication between the eastern and western seas, was opened the latter part of October. It is nearly 20 years since it was commenced, and it cost 900,000*l*.

Three bottles of green Gooseberries were lately accidentally dug up in England. They were in excellent preservation, although it is thought they had been buried a century or more. So says an English paper.—Might it not be well to try some experiments suggested by this fact?

DOMESTIC.—An ingenious mechanic in Philadelphia, has invented a new safety lock, to which he has given the name of *Patent Trap Lock*. It is contrived so that any key but its own being introduced into the lock, is made fast, and cannot be removed. The construction is simple, yet if five hundred locks were made, no key would fit any other than the one for which it was intended.

Counterfeit three dollar bills of the Eagle Bank of New Haven are in circulation in New York. They are intended to imitate those of the letter C, and are made payable to J. Ingersoll, dated Dec. 1st, 1818. The imitation is said to be very good, and well calculated to deceive.

A meeting of Printers and Booksellers of Philadelphia, has been called to choose a person to attend the four hundredth grand anniversary of the invention of the Art of Printing, to be celebrated at Haerlem, in Holland, in 1823.

The Hon. James Lloyd has been elected a Senator in Congress for six years from 4th March next.

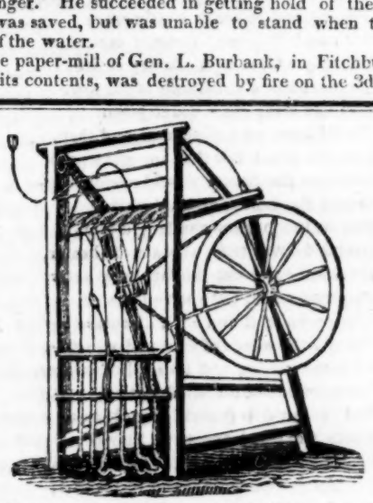
The Hartford Brewing Company offer a premium of twenty dollars, or a silver cup, or any other plate of that value to the Farmer who shall raise, sell, and deliver to the said Company, at their Brewery in that city, the best lot of Barley, the growth of the ensuing season, not less in quantity than one hundred bushels, being the produce of one farm—the quality of the barley to be ascertained by the weight of it.—For the next best lot of one hundred bushels, on the same terms, they will give a premium of ten dollars, in addition (in both cases) to the current price of barley. The barley to be delivered before the first day of January, 1824, on which day the premiums will be declared and paid. This notice is signed by Lorenzo Bull, agent.

On the 1st inst. during the snow storm, a barn was burnt at Hebron, Con. belonging to Mr. Daniel White, of that place—supposed to be the work of an incendiary. A horse, wagon, and a considerable quantity of grain were thus destroyed.

Ripe cherries were gathered near Norfolk, on the 4th of December last.

Miss Ann Robins, aged 22 years, was lately drowned in the river, opposite Middletown, in Connecticut. A number of young persons went to the river for the purpose of sliding; the deceased, with another lady, and two young gentlemen ventured on the ice, when she, with one of the gentlemen, slid within four or five feet of the glade, before they perceived it; but they were moving with so much rapidity as to be unable to check themselves, and plunged into the water. She had hold of the gentleman's arm, when they went in, but immediately released her grasp; he turned round and took her by the arm; she then got hold of the ice but it gave way; he continued supporting her till his feet becoming entangled in his cloak, he could support her no longer. He succeeded in getting hold of the ice, and was saved, but was unable to stand when taken out of the water.

The paper-mill of Gen. L. Burbank, in Fitchburgh, with its contents, was destroyed by fire on the 3d inst.



BROWN'S PATENT VERTICAL FAMILY SPINNER.

FOR SALE, at the Agricultural Warehouse, in Chambers No. 20, Merchant's Row, (opposite the East end of the Old Market)—a number of

Brown's Patent Family Wool Spinners,

which are found on trial to be one of the most useful domestic implements that have ever been invented for that purpose, being of so simple and easy construction that a girl of the age of 15 can well do the work of six persons in spinning, and so compact in its form as not to require so much space as a common family spinning wheel. The advantage of this machine over and above the common mode of family spinning, is at once tested in a few minutes operation with the machine; it at once discovers its immense saving of labor, its accuracy in spinning a good thread, and the quantity it will spin. It requires no further examination to judge of its utility than to see it operate. It is afforded at so low a price as to bring it in common use to every practical farmer, and is well calculated for the employment of the inmates of our common town's poor houses.—Any number of Machines can be furnished at the shortest notice, and warranted. Jan. 11.

FOR THE NEW ENGLAND FARMER.

The Pig and the Connoisseurs; or Nature out-acted. An Apologue for Criticks.

[Altered from SMART, a British Poet.]

A wealthy cit, the other day,
Having a notion for display,
Built him a large, commodious stage
To show the mirror of the age,
Invited all of Thespian fame
All critics too of any name,
The chiefs and followers of the ton
For actors, or for lookers-on.
To this assemblage with the rest
There came a genius who profess'd
To have a curious trick in store
To set an audience in a roar.
Throughout the city this got air,
And every body came to stare.
The actor soon his entry made
With neither prompter nor parade;
'Twas all attention, all suspense,
And silence gagg'd the audience.
He hid his head behind his wig,
And with such truth took off a pig,
All swore 'twas serious and no joke,
And doubtless underneath his cloak
The man had hid a grunting elf,
Or was a real hog himself.
A search was made, no pig was found,
With thundering claps the walls resound—
Box, pit and galleries jointly roar,
"O rare! O brave! encore! encore!"
Old Roger Grouse, a country clown,
Who yet knew something of the town,
And like some other countrymen
Would have his notions now and then,
Thought it not fair that our metropolis
Such genuine humor should monopolize—
Beheld the mimic, and his whim,
And on the morrow challeng'd him,
Declar'd 'twas true, as scale of Gunter,
He could out-grunt the famous grunter.
The trial came, but each spectator
Was prejudic'd, and rank ill nature
Usurp'd the minds of men and wenches,
All came to hiss, and break the benches.
The mimic took his usual station,
And squeak'd to general approbation.
Again "encore! encore!" they cry,
"This beats the Old Nick, high and dry."
But Hodge conceal'd, amid the racket,
A *real pig* beneath his jacket—
Then forth he came, and with his nail
Pinch'd the poor noisy urchin's tail.
The tortur'd pig, from vocal throat
Pour'd forth the natural swinish note;
Pit, box and gallery bawl'd "egad,
"Sure never stuff was half so bad,
"Was never actor made a greater
"Departure from the line of nature—
"That like a pig?" each cried in scoff,
"Pshaw! nonsense! bockhead! off! off! off!"
The mimic was extoll'd, but Grouse
Was hiss'd and hustled from the house.
"Hearken—one word before I go,"
Cried honest Grouse, and stooping low
Produc'd the pig, and thus aloud
Address'd the stupid, partial crowd:
"Behold and learn from this poor creature,
"How much you critics know of nature;
"Fools will be fools in spite of art,
"While *nature* acts a *natural* part."

From Silliman's Journal of Science.

LEGHORN HATS.

On the Material and Manufacture of the Italian Bonnets, and the Habits and State of Society of the Manufacturers.

Chateauvieux, in his agreeable and instructive letters, written from Italy, to Pictet, in 1812 and 1813, describes the persons who manufacture the Tuscan bonnets, and their state of society. In his sixth letter, which is dated at Florence, are the following observations:

"The road I travelled, was bordered on both sides with village houses, whose distance from each other did not exceed one hundred paces. They are all built of brick; and the architect has bestowed upon them a justness of proportion, and an elegance of form, unknown in our climates. They consist of a single pavilion, that has often but one door and two windows in front. These houses are always situated along the road, and separated from it by a terrace and supporting wall, some feet in breadth. Upon this wall usually stand several vases of the antique shape, containing aloe plants, flowers and young orange trees. The house itself is entirely covered with vine branches; so that, during summer, one knows not whether they are so many pavilions of verdure, or dwellings prepared for winter.

"In the front of these houses, swarms of young country girls are seen, dressed in white linen, with corsets of silk, and straw hats, adorned with flowers, inclining to one side of the head. They are constantly occupied in braiding the fine plait, the treasures of this valley, from which the straw hats of Florence are made.

"This branch of industry has become the source of the prosperity of the valley of the Arno. It produces, yearly, three millions of livres; which are distributed exclusively among the women; for the men never engage in this occupation. Each young girl buys for a few pence the straw she wants: she then exerts her skill to braid it as fine as possible; and she herself sells, and for her own profit, the hats she has prepared. The money she thus earns constitutes her portion. The father of the family has nevertheless the right to require of the women belonging to his house, a certain amount of rustic labor on the farm. He receives this labor from the females of the mountains (the Appenines,) whom the girls of the plains pay, out of the produce of their hats, for performing the task in their stead. One of them can earn from thirty to forty sous a day in braiding her straw, while she can hire a poor Appenine woman to do her field labor for eight or ten; and they secure, by this commutation of service, the delicacy and flexibility of their fingers necessary for their nice and fine work, and which would be spoiled by such exercises as harden and stiffen the hands.

"Such, Sir, are the female peasants of the vale of the Arno; whose grace and beauty are so celebrated by travellers; whose language, Alfieri went there to study; and who seem, in fact, born to embellish the arts, and to furnish them models. They are shepherdesses of Arcadia, but they are not peasants—they possess only the health and freedom from care of that state, and never know its anxieties, its sun-burnings, and its fatigues.

"I have been informed, that a crop of two acres is sufficient for all the straw of the hat-manufacture of Tuscany. This straw is the product of a headless wheat, harvested before it is quite ripe, and whose vegetation is whitened by the sterility of the soil. This soil is selected among the calcareous hills; it is never manured, and the seed is sown very thick. These habitations, so near to each other show of themselves that the domains to which they belong are very limited, and that property is remarkably subdivided in these valleys. In fact, the extent of these little plantations is only from three to ten acres. They lie around the dwelling, and separated into lots by small canals and rows of trees. These trees are sometimes mulberries, almost always poplars, whose leaves serve to feed their animals. Each of them sustains a vine, whose branches the cultivator entwines in a thousand directions.

"These lots laid out in long squares, are extensive enough to be cultivated by a plough without wheels drawn by two oxen. There is one pair of these creatures among ten or a dozen of these tenants; and they are employed, in succession, for working all the farms in the connexion. These oxen came from the states of Rome and Maremmes; they are of the Hungarian breed, and are exceedingly well kept, being covered with white clothes, decorated with a great deal of embroidery, and with scarlet tassels.

"Most of these land laborers keep a horse of a fine and elegant form. He is harnessed to a small two wheeled cart, neatly constructed, and painted red. It serves for all the purposes of transportation on the farm, and more especially to convey the good man's daughters to the mass and the ball. Accordingly, on holidays, the roads are filled with hundreds of these little carts, moving in all directions, and carrying the young girls, adorned with flowers and ribbands.

"The farms of the valley of the Arno have not forage enough to support cows: the cultivators, therefore, feed heifers only. These they buy at the age of three months, and keep them until eighteen, when they are sold to the butcher, and young ones bought in their places. It is from the pastures of Maremmes that the drovers bring the heifers to the fair in the valley of Arno.

"You will comprehend the motive for this practice, when I shall have explained to you the feeding systems adopted in these valleys. There is no natural meadow. The leaves of the trees, the trash of the legumes, and a little clover, are the only feed for the animals. In this country, every thing is reserved for men, whose numbers have augmented beyond measure, under the most ancient civilization, &c. &c.

The plant it will be remembered, of which the finest Leghorn bonnets are made, is a wheat—varieties of the summer and winter wheat of the Arno.

Counsellor Littienstern, of Frankfort on the Maine, has published a very singular work, in which he attempts to prove, argumentatively and methodically, that the predictions respecting Anti Christ are now on the eve of being accomplished. Anti Christ, he asserts, will appear in 1823; his arrival will be succeeded by ten years religious wars; after which the Millennium, as he assures us, will commence in 1836!